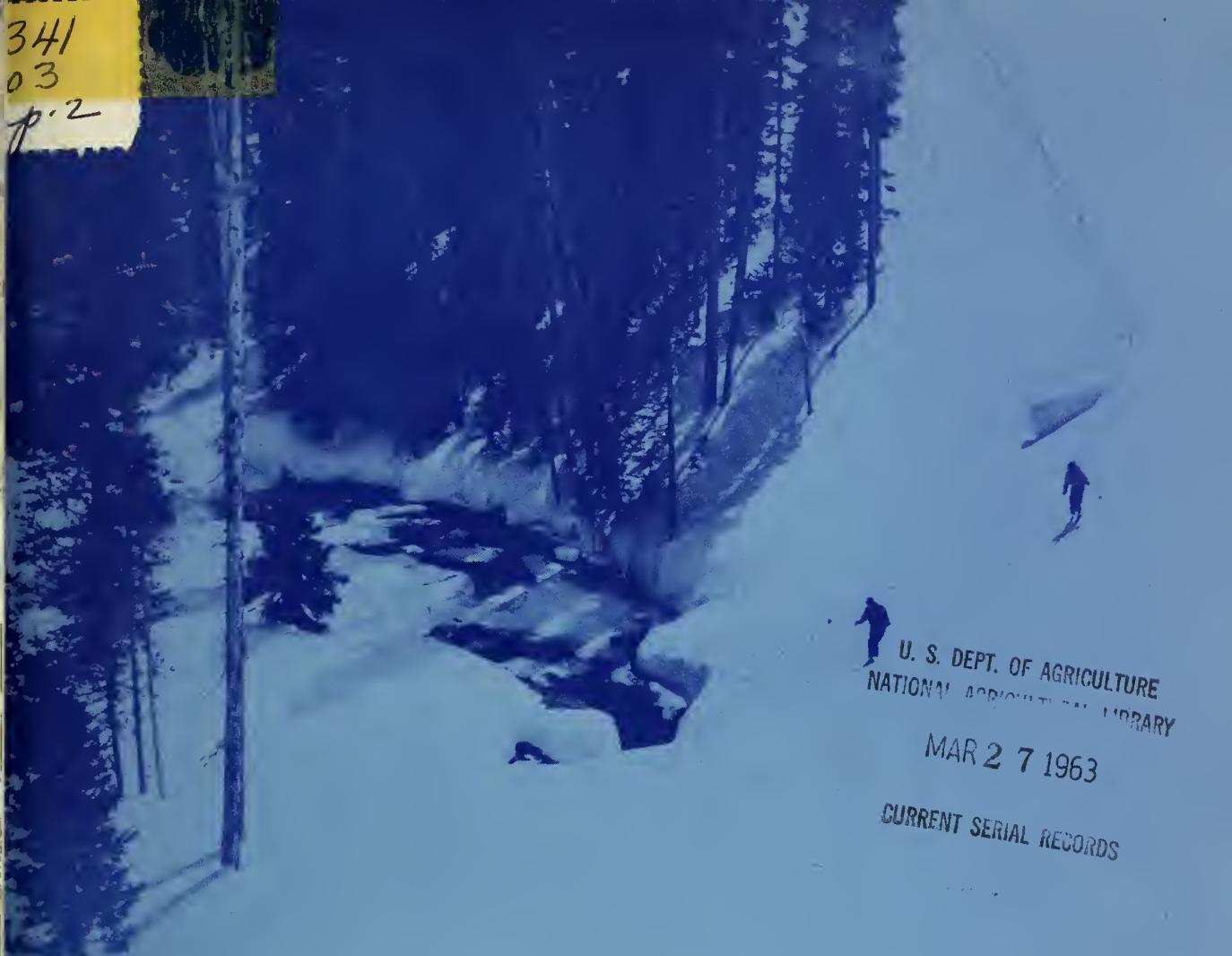


Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



341
03
P.2



U. S. DEPT. OF AGRICULTURE
NATIONAL AGRICULTURAL LIBRARY
MAR 27 1963

CURRENT SERIAL RECORDS

WATER SUPPLY OUTLOOK and FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS for WYOMING

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE,
and
STATE ENGINEER of WYOMING

Data included in this report were obtained by the agencies
named above in cooperation with the Bureau of Reclamation,
U.S. Forest Service, National Park Service, and other Federal,
State and private organizations.

AS OF
FEB. 1, 1963

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

To Recipients of Water Supply Outlook Reports:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from advance estimates of the streamflow.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, up to 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1400 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

Streamflow forecasts are obtained by a comparison of total or maximum snow accumulation, as measured by snow water equivalent, to the subsequent spring and summer or snowmelt season runoff over a period of years. The snow water equivalent measured in selected snow courses provides most of the index to the streamflow forecast for the following season. More accurate forecasts are usually obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast procedure. Early season forecasts assume average climatic conditions through the snowmelt season.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions. Soil Conservation Service Reports may be secured from Water Supply Forecasting Unit, Soil Conservation Service, P.O. Box 4170, Portland 8, Oregon.

PUBLISHED BY SOIL CONSERVATION SERVICE

<u>REPORTS</u>	<u>ISSUED</u>	<u>LOCATION</u>	<u>COOPERATING WITH</u>
RIVER BASINS			
WESTERN UNITED STATES			
	MONTHLY (FEB.-MAY)	PORTLAND, OREGON	ALL COOPERATORS
STATES			
ALASKA	MONTHLY (MAR.-MAY)	PALMER, ALASKA	ALASKA S.C.D.
ARIZONA	SEMI-MONTHLY (JAN.15 - APR.1)	PHOENIX, ARIZONA	SALT R. VALLEY WATER USERS ASSOC. ARIZ. AGR. EXP. STATION
COLORADO AND NEW MEXICO	MONTHLY (FEB.-MAY)	FORT COLLINS, COLORADO	COLO. STATE UNIVERSITY COLO. STATE ENGINEER N. MEX. STATE ENGINEER
IDAHO	MONTHLY (JAN.-JUNE)	BOLSE, IDAHO	IDAHO STATE RECLAMATION ENGINEER
MONTANA	MONTHLY (JAN.-JUNE)	BOZEMAN, MONTANA	MONT. AGR. EXP. STATION
NEVADA	MONTHLY (JAN.-MAY)	RENO, NEVADA	NEVADA DEPT. OF CONSERVATION AND NATURAL RESOURCES - DIVISION OF WATER RESOURCES
OREGON	MONTHLY (JAN.-JUNE)	PORTLAND, OREGON	OREG. STATE UNIVERSITY OREGON STATE ENGINEER
UTAH	MONTHLY (JAN.-JUNE)	SALT LAKE CITY, UTAH	UTAH STATE ENGINEER
WASHINGTON	MONTHLY (FEB.-JUNE)	SPOKANE, WASHINGTON	WN. STATE DEPT. OF CONSERVATION
WYOMING	MONTHLY (FEB.-JUNE)	CASPER, WYOMING	WYOMING STATE ENGINEER

PUBLISHED BY OTHER AGENCIES

<u>REPORTS</u>	<u>ISSUED</u>	<u>AGENCY</u>
BRITISH COLUMBIA	MONTHLY (FEB.-JUNE)	WATER RIGHTS BR., DEPT. OF LANDS, FORESTS AND NATURAL RESOURCES, PARLIAMENT BLDG., VICTORIA, B.C., CANADA
CALIFORNIA	MONTHLY (FEB.-MAY)	CALIF. DEPT. OF WATER RESOURCES, P.O. BOX 388, SACRAMENTO, CALIF.



INDEX TO WYOMING SNOW COURSES

DRAINAGE BASIN AND COURSE NAME	WYOMING NUMBER	LOCATION						DRAINAGE BASIN AND COURSE NAME	LOCATION						DRAINAGE BASIN AND COURSE NAME	WYOMING NUMBER	LOCATION															
		ELEV.	SEC.	LAT.	TWP.	RANGE LONG.	RECORDO		MEAS.	MEAS.	MEAS.	MEAS.	MEAS.	MEAS.			ELEV.	SEC.	LAT.	TWP.	RANGE LONG.	RECORDO	MEAS.	MEAS.								
MISSOURI RIVER DRAINAGE																																
MAISON RIVER								POWDER RIVER							SOURI RIVER DRAINAGE																	
Norris Basin	10E2	7500	14 44'	110 42'	1936	2,3,4,5	2	Bear Trap	7F1A	10 10	15N	85W	1960	2,3,4,5	I	SNAKE RIVER BASIN (Above Jackson Lake)																
21 Mile m	11E6	7150	1 34	115 5E	1934	1,2,3,4,5	1	Canyon Creek	7F2	0 16	13N	85W	1960	2,3,4,5	I	Arizona	10F1	6850	35	16N	115W	1919	2,3,4	5								
West Yellowstone m	11E7	6700	34	135 5E	1934	1,2,3,4,5	1	Clouds Peak	7E36A	10 15	51N	85W	1960	2,3,4	I	Astor Creek	10E8	7700	14 17'	110 37'	1919	2,3,4	5									
YELLOWSTONE								County Line	7E6MP	0 1	48N	85W				Base Camp	10F2	6900	20	16N	113W	1917	2,3,4	5								
Canyon	10E3	7750	14 44'	110 30'	1938	1,2,3,4,5	1	Muddy Creek G.S.	6F2	0 2	48N	85W	1956	2,3,4,5	I	Coulter Creek	10E10	7600	14 09'	110 33'	1919	2,3,4	2									
Cooke City m	10D7MP	7600	33	95	14E	1937	1,2,3,4,5	Hunkres Pass	7E8	0 11	48N	85W	1950	2,3,4,5	I	Glade Creek	10E13	7200	14 08'	110 44'	1919	2,3,4	5									
Crevice Mountain m	10D5	8100	22	95	9E	1935	3,4	Onion Gulch	7E27M	0 31	18N	85W	1956	2,3,4,5	I,6	Grassy Lake	10E15MP	7265	6	48N	116W	1919	2,3,4,5	5								
East Entrance	9E5MP	7000	14 29'	110 00'	1940	1,2,3,4,5	2	Soldier Park	7E5	0 36	51N	85W	1950	2,3,4,5	I,6	Huckleberry Divide	10E14	7300	32	48N	115W	1919	2,3,4	5								
Lake Camp #1, #2	10E1M	7850	14 34'	110 24'	1937	1,2,3,4,5	1	Sour Dough	6E1	0 17	49N	84W	1936	2,3,4,5	I,6	Lewis Lake Divide	10E9	7900	14 13'	110 40'	1919	2,3,4,5	5									
Lupine Creek	10E1	7300	14 54'	110 37'	1938	1,2,3,4,5	2	SWEETWATER																								
Thumb Olvide	10E7	7900	14 22'	110 35'	1946	2,3,4	5	Granner Meadows	8G4	0 19	30N	100W	1937	2,3,4,5	I	Moran	10F4MP	6800	8,17	48N	114W	1919	2,3,4	5								
Sylvan Pass	10E5	7100	14 28'	110 02'	1936	1,2,3,4,5	2	Larsen Creek	906A	0 12	30N	103W	1919	2,3,4,5	I	Moran Bay	10F3	6800	9	45N	116W	1919	2,3,4	5								
CLARK'S FORK								South Pass	8G3MP	0 13	30N	101W	1939	2,3,4,5	I	Snake River Station	10E12MP	6780	14 08'	110 40'	1919	2,3,4	5									
Lodgepole	9E1	8200	32	56N	106W	1940	2,3,4,5	I,4	LARAMIE RIVER																							
WIND RIVER								Brooklyn Lake #2	6H1MP	10 11	16N	79W	1956	2,3,4,5	I	Afton R.S.	10E4	6200	30	32N	118W	1936	1,2,3,4,5	4								
Big Horn	9F12	8800	36	42N	109W	1955	2,3,4,5	I	Cameron Pass c	5A1	15 16	6N	76W				Blackrock	10F7	8600	4	44N	111W	1936	2,3,4	5							
Burroughs Creek	9F4	8800	15	43N	107W	1948	2,3,4,5	I	Oeadmon Hill c	5A6	19 26	10N	75W	1937	3,4,5	I	Blind Bull Summit	10E2A	8750	6	34N	115W	1948	2,3,4	1							
Oinwoodie	9F10	10000	8	3N	6W	1948	2,3,4,5	I,3	Evans	6H15	0 4	12N	78W	1960	2,3,4,5	I	Bryan Flat	10F14	6250	9	38N	115W	1936	1,2,3,4,5	I							
Oinwoodie Glaciers	9F17A	10500	13 16'	109 38'	1959	2,3,4	I	Foxpark	6H12P	0 21	13N	78W	1936	2,3,4,5	I	CCC Camp	10E7	7500	9	29N	118W	1936	1,2,3,4,5	I,4								
Dry Creek	9F9	9500	10	3N	6W	1948	2,3,4,5	I,3	Hairpin Turn #3	6H2	0 24	16N	79W	1936	2,3,4,5	I	Cottonwood Lake	10E5A	7500	25	31N	118W	1936	2,3,4	1							
OuNoir	9F6	8750	27	42N	108W	1940	2,3,4,5	I	Libby Lodge #2	6H3	0 29	16N	78W	1936	2,3,4,5	I	Deadman Ranch	10E1A	6530	32	35N	116W	1936	2,3,4	1							
Geysir Creek	9F7	8500	12	41N	108W	1948	2,3,4,5	I	Lost Lake c	5A23	0 32	8N	75W				East Rim Olivide	10F17MP	7950	32	37N	111W	1936	1,2,3,4,5	I,4							
Little Horn	9F8	9500	24	41N	108W	1948	2,3,4,5	I	McIntyre c	5A15	0 35	10N	76W	1949	2,3,4,5	I	Four Mile Meadows	10F6	7770	35	45N	112W	1936	2,3,4,5	I,5							
Sheridan R.S. #2	9F14	7500	3	42N	109W	1955	2,3,4,5	I	Pole Mountain #2	5H1	0 35	15N	72W	1936	2,3,4,5	I	Grey's Boundary	10F18	5800	33	37N	118W	1936	1,2,3,4,5	I,4							
T-Cross Ranch	9F3	8000	1	43N	107W	1940	2,3,4,5	I	Roach c	6H12A	0 5	10N	77W	1940	2,3,4,5	I	Gros Ventre	10F19	8750	36	40N	111W	1948	2,3,4,5	I							
Togwotee Pass	10F9MP	9600	29	44N	110W	1956	2,3,4,5	5	CROW CREEK																							
POPO AGIE RIVER								Pole Mountain #2	5H1	0 35	15N	72W	1936	2,3,4,5	I	Grover Park Olivide	10E3	7500	27	33N	118W	1936	1,2,3,4,5	I,4								
NORTH PLATTE								Albany	6H11A	9 18	14N	78W	1949	2,3,4,5	I	North Barrett Creek	6H5MA	9 30	16N	80W	1936	2,3,4,5	I,6									
Blue Ridge	8G2	9500	23	31N	101W	1939	2,3,4,5	I	Bottle Creek	6H8	0 24	11N	85W	1936	2,3,4,5	I,6	North French Creek	6H4PA	10 27	16N	80W	1938	2,3,4,5	I,6								
Bruce's Camp	8G5	6500	24	32N	101W	1955	2,3,4	I	Boxelder #2	5G1	9 31	30N	75W	1950	2,3,4,5	I	Old Battle	6H10P	9 29	14N	85W	1936	2,3,4,5	I,6								
Hobbs Park	9G3	10000	22	25	3W	1948	2,3,4,5</td																									

WATER SUPPLY OUTLOOK
FOR
WYOMING

February 1, 1963

THE NORTH PLATTE RIVER BASIN - The April 1 to September 30, 1963, runoff is forecast at 55 percent of normal at the Wyoming-Colorado State-line; 78 percent coming in from the Encampment River watershed and 50 percent of average flow from the Snowies. The total yield at Saratoga adds up to 430,000 acre feet, or 65 percent of the average seasonal supply.

The outlook for the Laramie at Jelm is 60 percent and for the Medicine Bow near Hanna, 50 percent.

The North Platte Reservoir system is standing at 96 percent of the 15-year average amount for February 1.

THE COLORADO RIVER BASIN is also severely below normal. The Green River at Warren Bridge is estimated at 95 percent, but feeder watersheds downstream will contribute 61 percent from North Piney Creek and the New Fork River, and 75 percent from the Big Sandy for a computed figure of 71 percent at Green River, Wyoming.

THE LOWER YELLOWSTONE BASIN is storing a snow pack which will release 76 percent of normal at Dubois, 78 percent into Bull Lake, and 80 percent from the Popo Agie drainage.

The Shoshone River Basin is expected to discharge 75 percent of the 15-year average into Buffalo Bill Reservoir. From the west flank of the Big Horns, close to normal flows will enter the Big Horn River.

THE COLUMBIA RIVER BASIN watershed in Wyoming indicates seasonal water supplies of 71 percent into Jackson Lake Reservoir, 70 percent from Pacific Creek, and 2,000,000 acre feet of water, or 71 percent of normal snow melt runoff into Palisades Reservoir. From the south, the Grey's River snow pack will release 62 percent of its average supply to Palisades; and the Salt River correlation indicates 70 percent of average summer flow into the reservoir.

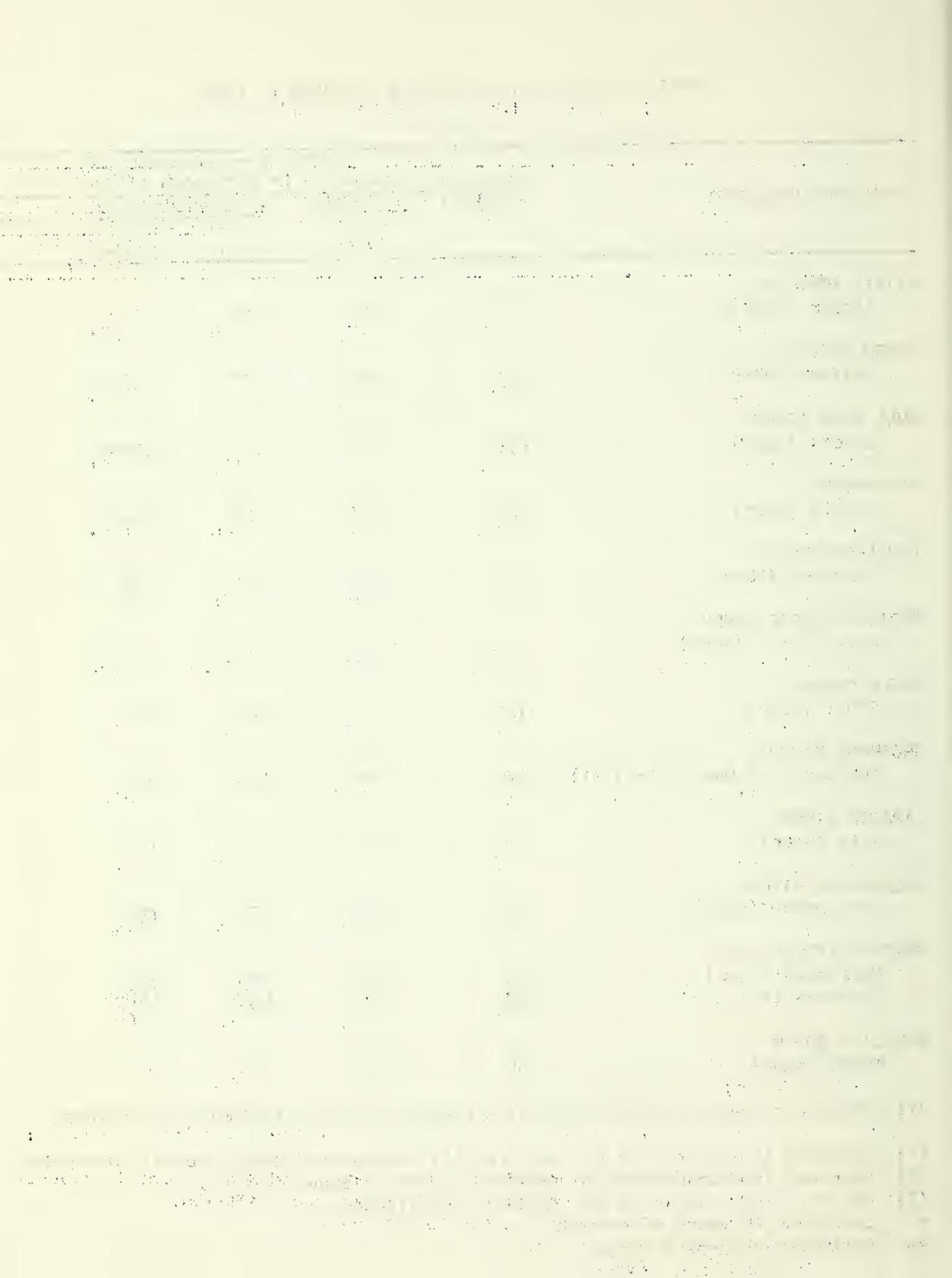
THE BEAR RIVER drainage is expected to yield 71 percent from the Smith's Fork and 73 percent of normal for the Bear River at the Wyoming-Utah Stateline.

WYOMING STREAM-FLOW FORECASTS FEBRUARY 1, 1963

BASIN AND TRIBUTARY	April 1 - September 30				
	Seasonal Forecast	Stream-Flow in Thousands of Acre Feet		Measured Runoff	
		% 15-Year Average	1961	15-Yr. Avg.	1943-57
LITTLE POPO AGIE Lander (near)	35	81%	25	43*	
NORTH POPO AGIE Milford (near)	59	80%	57	74*	
BULL LAKE CREEK Lenore (near)	132	78%	134	170*	
WIND RIVER Dubois (near)	76	76%	60	100*	
TENSLEEP CREEK Tensleep (near)	76	95%	51	80	
MEDICINE LODGE CREEK Hyattville, (near)	19.5	100%	13.3	19.4	
SHELL CREEK Shell (near)	62	97%	47	64	
SHOSHONE RIVER Buffalo Bill Dam (below) (1)	640	75%	459	851	
LARAMIE RIVER Jelm (near)	68	60%	98	113	
ENCAMPMENT RIVER Encampment (near)	122	78%	77	156	
NORTH PLATTE RIVER Northgate (near) Saratoga (at)	140 430	55% 65%	200 404	255 661	
MEDICINE BOW RIVER Hanna (near)	50	50%	46	99	

All stream data taken from observed flow records with the following exceptions:

- (1) Observed flow corrected for Buffalo Bill storage and Heart Mountain diversion.
- (2) Observed flow corrected for Colorado diversion above station.
- (3) Observed flow corrected for Jackson Lake storage.
- * Less than 15 years of record.
- ** Estimated 1943-57 average.



WYOMING STREAM-FLOW FORECASTS FEBRUARY 1, 1963

BASIN AND TRIBUTARY	April 1- September 30				
	Seasonal Stream-Flow in Thousands of Acre Feet		Measured Runoff 1961	15-Yr. Avg. 1943-57	
	Forecast Runoff	% 15-Year Average			
GREEN RIVER					
Warren Bridge (at)	330	95%	220	348	
Fontenelle (near)	700	71%	399	983*	
Green River (at)	850	71%	393	1200	
NORTH PINEY CREEK					
Mason (at)	25	61%	20	41	
NEW FORK RIVER					
Boulder (near)	160	61%	91	261	
BIG SANDY CREEK					
Big Sandy (near)	44	75%	29	59	
LITTLE SANDY CREEK					
Elkhorn (near)	11.2	75%	8	15	
SNAKE RIVER					
Moran (at) (3)	655	71%	669	928	
PACIFIC CREEK					
Moran (near)	130	70%	113	185*	
SNAKE RIVER					
Palisades (above)	2000	73%	1930	2758*	
GREY'S RIVER					
Palisades (above)	250	62%	227	403	
SALT RIVER					
Etna ab. Palisades	251	70%	164	360	
BEAR RIVER					
Utah-Wyo. State Line (near)	90	73%	66	123	
Randolph (near)	23	20%	5	115*	
SMITH'S FORK					
Border (near)	85	71%	49	119	

WYOMING SNOW SURVEYS - ABOUT FEBRUARY 1, 1963

Drainage Basin and Snow Course	Number or State	Elev.	SNOW COVER MEASUREMENTS					PAST RECORD	
			Date of Survey	1963	Snow Depth (In.)	Water Content (In.)	Water Content	1962	1961
									1943-57 Averages
<u>MADISON RIVER - YELLOWSTONE PARK</u>									
Norris Basin $\frac{1}{2}$	10E2	7500	1/31	31	7.3	8.4	4.7	7.1e	
21 Mile ^m	11E6	7150	1/31	31	6.1	15.0	7.8	13.0	
West Yellowstone ^m	11E7	6700	1/30	21	3.8	7.4	4.9	8.8	
<u>UPPER YELLOWSTONE - YELLOWSTONE PARK</u>									
Canyon	10E3	7750	1/30	36	7.2	11.1	6.2	10.4e	
Northeast Entrance ^m	10D7MP	7100	1/31	29	6.0	7.0	4.1	6.0*	
East Entrance $\frac{1}{2}$	9E5MP	7000	1/28	27	6.6	7.8	5.4	8.1e	
Lake Camp #1	10E1	7850	1/31	25	3.5	7.8	3.1	7.7e	
Lake Camp #2	10E1	7850	1/31	22	3.0	7.3	3.2	6.7e	
Lupine Creek	10E1	7300	1/31	25	5.4	10.4	4.9	7.1e	
Norris Basin $\frac{1}{2}$	10E2	7500	1/31	31	7.3	8.4	4.7	7.1e	
Sylvan Pass $\frac{1}{2}$	10E5	7100	1/28	30	5.5	9.8	5.7	10.2e	
Thumb Divide $\frac{1}{2}$	10E7	7900	1/30	38	8.6	17.6	8.4	15.9e	
<u>LOWER YELLOWSTONE - CLARK'S FORK</u>									
Lodgepole	9E1	8200	2/1	36	6.6	7.2	3.8	8.3e	
<u>LOWER YELLOWSTONE - WIND RIVER</u>									
Big Warm	9F12	8800	1/27	20	4.1	7.9	4.2	7.6e	
Burroughs Creek	9F4	8800	1/29	28	5.8	11.0	5.1	11.7e	
Dinwoodie	9F10	10000	1/30	18	3.3	10.9	4.7	8.4e	
Dinwoodie Glaciers	9F17A	10000	N.R.		A	9.0A	3.0A		
Dry Creek	9F9	9500	1/30	10	1.9	5.9	2.5	4.3e	
DuNoir	9F6	8750	1/27	18	3.7	7.6	2.7	6.1e	
Geyser Creek	9F7	8500	1/28	16	4.0	6.8	2.2	5.7e	
Little Warm	9F8	9500	1/28	30	6.2	14.4	7.2	11.7e	
Sheridan R.S. #2	9F11	7500	1/28	17	3.4	6.4	2.1	5.7e	
T-Cross Ranch	9F3	8000	1/29	19	3.8	5.3	2.4	5.5	
Togwotee Pass $\frac{1}{2}$	10F9MP	9600	1/31	64	13.6	21.6	15.3	20.6	
Twenty Lakes $\frac{1}{2}$	9F7A	10000	N.R.		A	9.0A	2.0A		
<u>LOWER YELLOWSTONE - OWL CREEK</u>									
Kirwin $\frac{1}{2}$	9F19A	10000	N.R.		A	7.5A	2.0A		
Owl Creek	8F1	8700	1/28	15	2.2	4.7	4.3	4.5e	

WYOMING SNOW SURVEYS - ABOUT FEBRUARY 1, 1963

Drainage Basin and Snow Course	Number or State	Elev.	SNOW COVER MEASUREMENTS				PAST RECORD	
			Date of Survey	Snow Depth (In.)	Water Content (In.)	Water Content (In.)	1943-57 Averages	
			1963			1962	1961	
<u>LOWER YELLOWSTONE - POPO AGIE RIVER</u>								
Blue Ridge	8G2	9500	1/23	13	2.7	8.2	4.1	8.6e
Bruce's Camp	8G5	6500	1/24	11	2.1	3.3	1.6	1.9e
Hobbs Park	9G3	10000	2/1	36	7.4	13.1	8.0	12.8e
Mosquito Park R.S.	9G4	9500	2/1	22	3.9	6.8	2.4	5.6e
Sawmill Glade	8G1	8500	1/24	13	2.4	5.7	3.3	5.5e
South Pass ♯	8G3MP	9000	1/23	15	3.2	10.6	4.2	10.2e
St. Lawrence R.S.	9F11	9000	1/28	13	1.8	6.2	2.6	4.7e
Trout Creek	9G2	8400	2/1	10	2.4	5.5	2.1	4.5e
Twenty Lakes ♯	9G7A	10000	N.R.		A	9.0A	2.0A	
<u>LOWER YELLOWSTONE - GREYBULL RIVER</u>								
Frontier Needle	9E6	10000	N.R.		A	N.R.	2.0A	
Kirwin ♯	9F19A	10000	N.R.		A	7.5A	2.0A	
Timber Creek	9E3	8800	2/1	13	2.6	4.2	1.7	2.3a
Wood River #2	9F15	8000	2/1	20	4.0	6.1	2.7	3.1a
<u>LOWER YELLOWSTONE - SHOSHONE RIVER</u>								
Carter Mountain	9E14M	7800	1/31	14	2.8	5.3	N.R.	3.5a
East Entrance ♯	9E5MP	7000	1/28	27	6.6	7.8	5.4	8.1e
Sylvan Pass ♯	10E5	9200	1/28	30	5.5	9.8	5.7	10.2e
Togwotee Pass ♯	10F9MP	9600	1/31	64	13.6	21.6	15.3	20.6
Younts Peak	9F18A	8500	N.R.		A	N.R.	4.0A	
<u>LOWER YELLOWSTONE - NOWOOD CREEK</u>								
Bear Trap ♯	7F1A	8000	2/3	24	5.4e	10.1	4.1	
Canyon Creek ♯	7F2	7400	2/4	24	5.5	10.0	5.9	
Cold Springs Camp	7E25	8700	1/29	24	4.4	7.4	3.5	5.1a
Medicine Lodge Lakes	7E24MP	9500	2/2	33	7.7	11.6	4.8	7.6a
Munkres Pass ♯	7E8	9700	2/1	24	4.7	9.5	3.5	6.1e
Onion Gulch ♯	7E27M	8100	2/3	25	5.4	10.2	4.3	6.7a
Tyrell R.S.	7E35	8300	2/3	28	5.5	8.2	4.1	4.5e
West Tensleep Lake	7E26A	9075	2/2	42	9.5A	12.5A	4.0A	8.1a

WYOMING SNOW SURVEYS - ABOUT FEBRUARY 1, 1963

Drainage Basin and Snow Course	Number or State	Elev.	SNOW COVER MEASUREMENTS					PAST RECORD	
			Date of Survey	Snow Depth (In.)	Water Content (In.)	Water Content	1963	1943-57	
							1962	1961	Averages
<u>LOWER YELLOWSTONE - SHELL CREEK</u>									
Bald Mountain $\frac{1}{2}$	7E21M	9600	1/29	55	13.6	19.8	11.4	13.8a	
Beaver Tongue $\frac{1}{2}$	7E20	9200	1/29	52	12.0	16.4	10.9	12.8a	
Bone Spring $\frac{1}{2}$	7E18A	9200	2/2	50	11.5A	15.5A	4.5A	10.4a	
Granite Pass $\frac{1}{2}$	7E17P	8950	1/30	40	8.9	14.3	8.6	11.0a	
Ranger Creek	7E1	8800	1/30	34	6.9	9.0	4.3	6.0e	
Shell Creek	7E23A	9600	2/2	42	9.5A	15.5A	6.0A	10.0a	
<u>LOWER YELLOWSTONE - TONGUE RIVER</u>									
Beaver Tongue $\frac{1}{2}$	7E20	9200	1/29	52	12.0	16.4	10.9	12.8a	
Big Goose #2	7E32M	7700	1/31	22	4.6	8.2	2.9	5.2a	
Bone Spring Divide $\frac{1}{2}$	7E18A	9200	2/2	50	11.5A	15.5A	4.5A	10.4a	
Burgess R.S. #2	7E33P	7900	1/28	25	5.1	6.3	3.5	5.1a	
Dome Lake #2	7E34A	8800	2/2	35	8.0A	8.5A	3.0A	5.9a	
Geneva Pass	7E37A	10600	2/2	39	9.0A	13.5A	3.0A		
Gloom Creek	7E14A	9300	2/2	17	10.5A	13.0A	4.5A	8.3a	
Granite Pass $\frac{1}{2}$	7E17P	8950	1/30	10	8.9	14.3	8.6	11.0a	
North Tongue	7E15	8800	1/29	34	7.6	10.8	5.7		
Sibley Lake	7E11	8000	1/28	33	6.8	9.9	4.9	6.9a	
Steamboat Point	7E10	7500	1/28	25	5.2	6.6	2.7	4.7a	
Sucker Creek	7E12A	9000	2/2	35	7.5A	11.0A	4.5A	7.5a	
Wood Rock G.S.	7E13	8500	1/30	29	6.0	10.3	4.4	7.2	
<u>LOWER YELLOWSTONE - PORCUPINE CREEK</u>									
Five Springs Falls	7E31	7500	2/5	32	7.8	4.2	3.2	4.1a	
Medicine Wheel	7E30	9000	1/29	52	12.5	11.7	8.5	10.3a	
<u>LOWER YELLOWSTONE - POWDER RIVER</u>									
Bear Trap $\frac{1}{2}$	7F1A	8000	2/3	24	5.4e	10.1	4.1		
Canyon Creek $\frac{1}{2}$	7F2	7400	2/4	24	5.5	10.0	5.9		
Clouds Peak	7E36A	10000	2/2	18	3.5A	11.0A	4.0A		
Muddy Creek G.S.	6E2	7500	2/1	12	2.4	4.4	1.7	2.9a	
Munkres Pass $\frac{1}{2}$	7E8	9700	2/1	24	4.7	9.5	3.5	6.1e	
Onion Gulch $\frac{1}{2}$	7E27M	8100	2/3	25	5.1	10.2	4.3	6.7a	
Soldier Park	7E5	8700	2/1	16	3.3	5.5	1.8	3.6e	
Sour Dough	6E1	8500	2/1	18	3.6	7.3	2.9	4.3e	

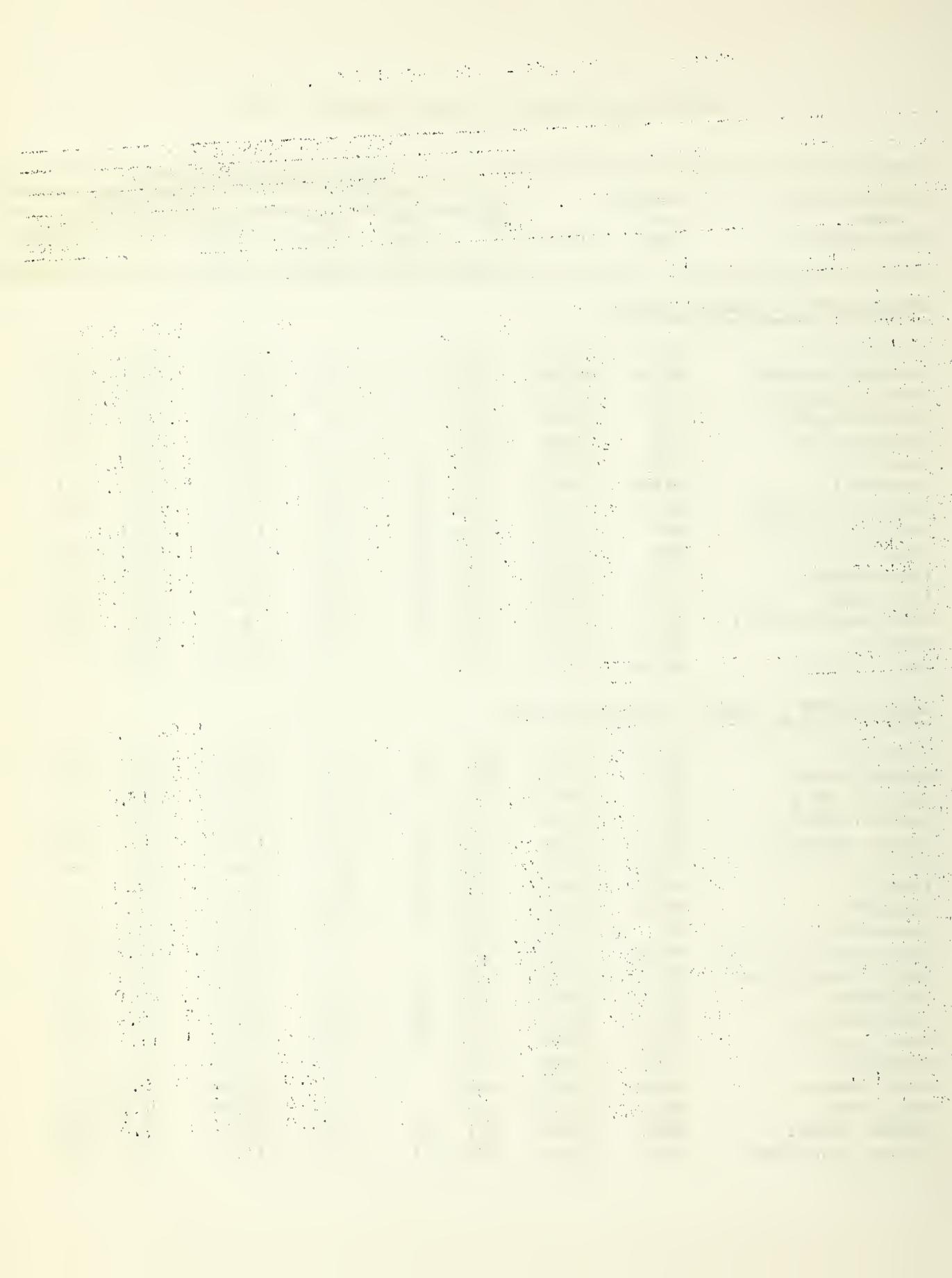
WYOMING SNOW SURVEYS - ABOUT FEBRUARY 1, 1963

Drainage Basin and Snow Course	Number or State	Elev.	SNOW COVER MEASUREMENTS				
			1963		PAST RECORD		
			Date of Survey	Snow Depth (In.)	Water Content (In.)	Water Content (In.)	1943-57 1961 Average
NORTH PLATTE - LARAMIE RIVER							

Albany $\frac{1}{2}$	6H11A	9400	N.R.	A	12.0A	5.0A	8.3e
Brooklyn Lake #2	6H1MP	10200	1/30	42	6.0	16.4	10.8 14.3e
Cameron Pass $\frac{C}{2}$	5J1	10300	N.R.	A	21.2A	7.8A	13.6
Chambers Lake $\frac{C}{2}$	5J2	9000	1/26	17	2.3	7.4	3.1 5.6e
Deadman Hill $\frac{C}{2}$	5J6	10300	N.R.	A	16.8A	6.1A	8.8
Evans $\frac{1}{2}$	6H15	9000	1/28	18	3.4	11.0	4.2
Foxpark $\frac{1}{2}$	6H12P	9200	1/30	16	2.4	7.9	2.8 4.1
Hairpin Turn #2	6H2	9500	1/30	25	2.8	8.3	5.0 7.7
Hairpin Turn #3	6H2	9500	1/30	33	4.3	11.2	7.5
LaBonte $\frac{1}{2}$	5G2	8450	1/30	11	1.5	5.8	3.6 4.1e
Libby Lodge	6H3	8700	1/30	28	3.5	7.6	4.8 7.0
Lost Lake	5J23	9300	1/26	21	4.2	10.2	5.3 7.4
Pole Mountain #2 $\frac{1}{2}$	5H1	8700	1/31	13	2.3	3.1	1.7 3.2
Roach $\frac{C}{2}$	6J12A	9800	N.R.	A	N.R.	4.1	11.2
Rock Creek $\frac{1}{2}$	6H14A	9800	N.R.	A	23.0A	11.0A	

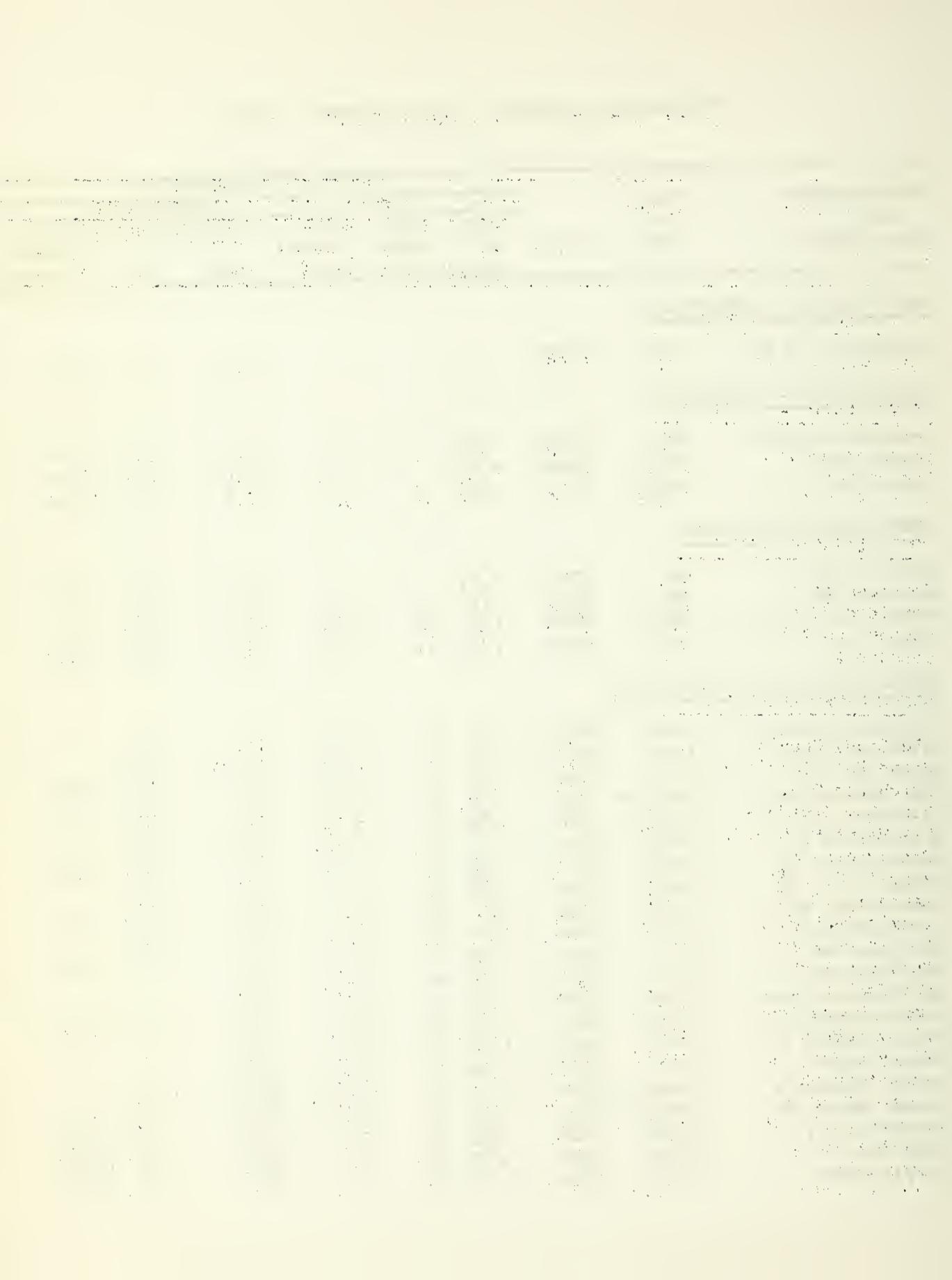
NORTH PLATTE - ABOVE SEMINOE RESERVOIR

Albany $\frac{1}{2}$	6H11A	9400	N.R.	A	12.0A	5.0A	8.3e
Bottle Creek	6H8	8200	2/1	32	7.1	10.8	5.4 9.0
Boxelder #2 $\frac{C}{2}$	5G1	9000	2/1	12	2.6	7.4	3.4
Cameron Pass $\frac{1}{2}$	5J1	10300	N.R.	A	21.2A	7.8A	13.6
Casper Mountain $\frac{1}{2}$	6G1MP	8700	1/31	24	4.9	13.0	6.9 7.7a
Columbine $\frac{C}{2}$	6J3	9300	1/28	40	7.9	18.4	10.2 15.3e
Evans $\frac{1}{2}$	6H15	9000	1/28	18	3.4	11.0	4.2
Foxpark $\frac{1}{2}$	6H12P	9200	1/30	16	2.4	7.9	2.8 4.1
LaBonte $\frac{1}{2}$	5G2	8450	1/30	11	1.5	5.8	3.6 4.1e
North Barrett Creek	6H5AM	9400	N.R.	A	15.5A	14.5A	11.3
North French Creek	6H4AP	10200	N.R.	A	22.5A	15.0A	17.2
Northgate	6J7	8500	1/28	12	2.3	6.8	2.3 3.9e
Old Battle $\frac{1}{2}$	6H10P	9800	2/1	56	12.9	22.4	14.3 20.0
Park View $\frac{C}{2}$	6J2	9200	1/28	19	3.3	7.2	3.7 5.9
Roach $\frac{C}{2}$	6J12	9800	N.R.	A	N.R.	4.1	11.2
Rock Creek $\frac{1}{2}$	6H14A	9800	N.R.	A	23.0A	11.0A	
Ryan Park	6H6A	8400	N.R.	A	12.0A	4.0A	6.5
Webber Spring	6H9M	9000	2/1	41	9.2	13.4	7.6 11.7
Willow Creek Pass $\frac{C}{2}$	6J5	9500	1/28	21	4.0	11.0	4.1 7.8



WYOMING SNOW SURVEYS - ABOUT FEBRUARY 1, 1963

Drainage Basin and Snow Course	Number or State	Elev.	SNOW COVER MEASUREMENTS					PAST RECORD	
			1963		Snow Depth (In.)	Water Content (In.)	Water Content (In.)	1962	1961
			Date of Survey	1943-57 Averages					
<u>NORTH PLATTE - CROW CREEK</u>									
Pole Mountain #2	5H1	8700					3.1	1.7	3.2
<u>NORTH PLATTE - SWEETWATER</u>									
Grannier Meadows	8G4	9000	1/23	16	3.1	11.1	4.5	10.2e	
Larsen Creek	9G6A	9000	N.R.		A.	9.8	6.1	7.3e	
South Pass	8G3MP	9000	1/23	15	3.2	10.6	4.2	10.2e	
<u>NORTH LARAMIE MOUNTAINS</u>									
Boxelder #1	5G1	9000	N.R.			7.5	3.0	3.9e	
Boxelder #2	5G1	9000	2/1	12	2.6	7.4	3.4		
Casper Mountain	6G1MP	8700	1/31	24	4.9	13.0	6.9	7.7a	
LaBonte	5G2	8450	1/30	11	1.5	5.8	3.6	3.9e	
<u>GREEN RIVER ABOVE GREEN RIVER</u>									
Big Sandy Opening	9G9P	9220	1/31	32	4.6	11.4	5.7		
Blind Bull Summit	10G2A	8750	2/1	50	10.0A	21.0A	11.5A		
Dutch Joe R.S.	9G5	8700	1/31	23	3.5	10.0	4.6	5.9e	
East Rim Divide	10F17MP	7950	1/31	27	4.8	10.6	2.8	7.7e	
Elk Heart Park G.S.	9F23P	9400	1/28	18	3.0	14.3	5.6		
Gros Ventre	10F19A	8750	2/1	37	8.5A	12.0A	4.0A	8.2e	
Kendall R.S. #1	10F15	7900	1/29	15	2.5	9.5	3.3	6.4e	
Kendall R.S. #2	10F15	7900	1/29	22	4.1	12.4	4.7		
Loomis Park #1	10F16	8500	2/1	50	10.1	16.2	5.8	11.4e	
Loomis Park #2	10F16	8500	2/1	51	10.9	15.8	5.7		
Mulligan Park	9G1	8900	1/28	14	2.8	11.3	4.0	7.8e	
New Fork Lake	9F21	8325	1/29	21	3.5	11.8			
North Horse Creek	10G16	8200	1/31	48	9.7	18.7			
Piney LaBarge #1	10G10	8820	1/29	25	6.2	18.9	7.7	13.0e	
Piney LaBarge #2	10G10	8820	1/29	38	8.5	22.3	10.1		
Pocket Creek	9G11	9360	1/30	19	3.2	12.4			
Poison Meadows	10G6A	8500	2/1	61	15.0A	30.0A	14.5A		
Snyder Basin #2	10G13MP	8040	1/29	27	4.2	16.7	6.4	10.3e	
South Pass	8G3MP	9000	1/23	15	3.2	10.6	4.2	10.2e	
Soda Lake	10G14	8300	1/30	33	7.1	15.7	8.2	14.0e	
Triple Peaks	10G15	8500	1/30	44	9.6	22.1	11.4	19.0e	



WYOMING SNOW SURVEYS - ABOUT FEBRUARY 1, 1963

Drainage Basin and Snow Course	Number or State	Elev.	SNOW COVER MEASUREMENTS				PAST RECORD	
			Date of Survey	1963	Snow Depth (In.)	Water Content (In.)	Water Content (In.)	1943-57
							1962	1961

GREEN RIVER BELOW GREEN RIVER

Big Park $\frac{1}{2}$	10G11	8700	1/25	31	4.7	18.5A	5.0A	
Buck Pasture ^u	10J23A	9700	2/4	27	5.0A	N.R.		
Elk River ^c	6J4	8700	1/28	32	7.1	15.1A	6.7A	10.8
Henry's Fork	10J24A	10200	N.R.		A	N.R.		
Kelly R.S.	10G12	8200	1/25	21	3.8	16.9		
Old Battle $\frac{1}{2}$	6H10P	9800	2/1	56	12.9	22.4	14.3	20.0
Steel Creek Park ^u	10J20A	9900	2/4	14	2.4A	N.R.		

JACKSON LAKE TO PALISADES

Afton R.S.	10G4	6200	1/30	10	2.7	5.1	1.1	3.8
Base Camp $\frac{1}{2}$	10F2	6900	1/31	42	8.6	13.3	7.3	13.2e
Blackrock	10F7	8600	1/31	48	9.1	14.8	10.1	15.7
Blind Bull Summit $\frac{1}{2}$	10G2A	8750	2/4	50	10.0A	21.0A	11.5A	
Bryan Flat	10F14	6250	1/30	13	2.3	9.7	4.3	7.0
CCC Camp $\frac{1}{2}$	10G7	7500	1/30	22	5.0	9.3	4.8	8.3
Cottonwood Lake	10G5A	7500	2/2	32	5.5A	17.5A	7.5A	
Deadman Ranch	10G1A	6534	2/4	25	5.0A	10.0A	4.0A	6.2e
East Rim Divide $\frac{1}{2}$	10F17MP	7950	1/31	27	4.8	10.6	2.8	7.7e
Four Mile Meadows	10F6	7770	1/31	35	6.3	10.1	7.5	9.8
Greys Boundary	10E18	5800	1/31	20	4.5	9.5	3.9	7.9
Gros Ventre $\frac{1}{2}$	10F19A	8750	2/4	37	8.5A	12.0A	4.0A	8.2e
Grover Park Divide	10G3	7500	1/30	23	5.1	10.5	4.6	7.9
Loomis Park #1 $\frac{1}{2}$	10F16	8500	2/1	50	10.1	16.2	5.8	11.4e
Loomis Park #2 $\frac{1}{2}$	10F16	8500	2/1	51	10.9	15.8	5.7	
Poison Meadows $\frac{1}{2}$	10G6A	8500	2/4	61	15.0A	30.0A	14.5A	
Salt River Summit $\frac{1}{2}$	10G8P	7900	1/30	33	5.6	13.0	6.6	10.5e
Snow King Mtn. #3	10F20M	7600	2/1	31	6.9	14.3	6.2	
Teton Pass #2	10F13	8500	1/28	33	8.5	26.2	14.2	26.0e
Togwotee Pass $\frac{1}{2}$	10F9MP	9600	1/31	64	13.6	21.6	15.3	20.6
Turpin Meadows	10F5	6930	1/31	27	4.9	8.5	5.6	8.1

WYOMING SNOW SURVEYS - ABOUT FEBRUARY 1, 1963

Drainage Basin and Snow Course	Number or State	Elev.	SNOW COVER MEASUREMENTS					
			Date of Survey	Snow Depth (In.)	Water Content (In.)	PAST RECORD		
						1963	1962	1961
							1943-57	

SNAKE RIVER ABOVE JACKSON LAKE

Arizona	10F1	6850	1/30	30	5.7	14.1	8.3	12.5e
Astor Creek	10E8	7700	1/30	48	10.9	23.1	12.3	22.1e
Base Camp	10F2	6900	1/31	42	8.6	13.3	7.3	13.2e
Coulter Creek	10E10	7600	1/28	38	8.4	16.2	9.2	15.3e
Glade Creek	10E13	7200	2/2	37	9.0	17.5	10.1	15.2e
Grassy Lake	10E15MP	7265	2/2	54	14.3	25.6	15.1	22.9
Huckleberry Divide	10E14	7300	1/30	35	6.6	14.9	8.6	13.2e
Lewis Lake Divide	10E9	7900	1/30	59	14.8	30.8	17.0	30.0e
Moran	10F4MP	6500	1/30	27	5.2	10.4	6.2	8.5e
Moran Bay	10F3	6800	N.R.			17.3	9.5	14.2e
Snake River Station	10E12MP	6780	1/30	41	8.3	15.9	10.1	13.9e
Thumb Divide \div	10E7	7900	1/30	38	8.6	17.6	8.4	15.9e

BEAR RIVER

Big Park \div	10G11A	8700	1/25	31	4.7	18.5A	5.0A	
CCC Camp \div	10G7	7500	1/30	22	5.0	9.3	4.8	8.3
Monte Cristo R.S. ^u	11H12	8960	1/29	35	7.4	19.3	7.6	17.0e
Poison Meadows \div	10G6A	8500	2/4	61	A	30.0A	14.5A	
Salt River Summit \div	10G8MP	7900	1/30	33	5.6	13.0		10.5e
Still Water Camp ^u	10J17	9800			NO REPORT			
Trial Lake ^u	10J8P	9800	1/30	42	6.5	19.4	8.5	17.1e

MISSOURI - CHEYENNE RIVER

Terry Peak ^s	3E2	7000			NO REPORT			
Upper Spearfish ^s	3E1	6500	2/1	21	4.3	4.5	4.1	4.4e

- a. Average of all past data
- c. Colorado snow courses
- e. 1943-57 partially estimated
- m. Montana snow courses
- s. South Dakota snow courses
- u. Utah snow courses
- \div Located close to divide
- M. Soil moisture stack
- P. Pearson storage gage
- A. Aerial stadia marker, water content estimated

STATUS OF WYOMING AND SOUTHERN DAKOTA RESERVOIR STORAGE - FEBRUARY 1, 1963

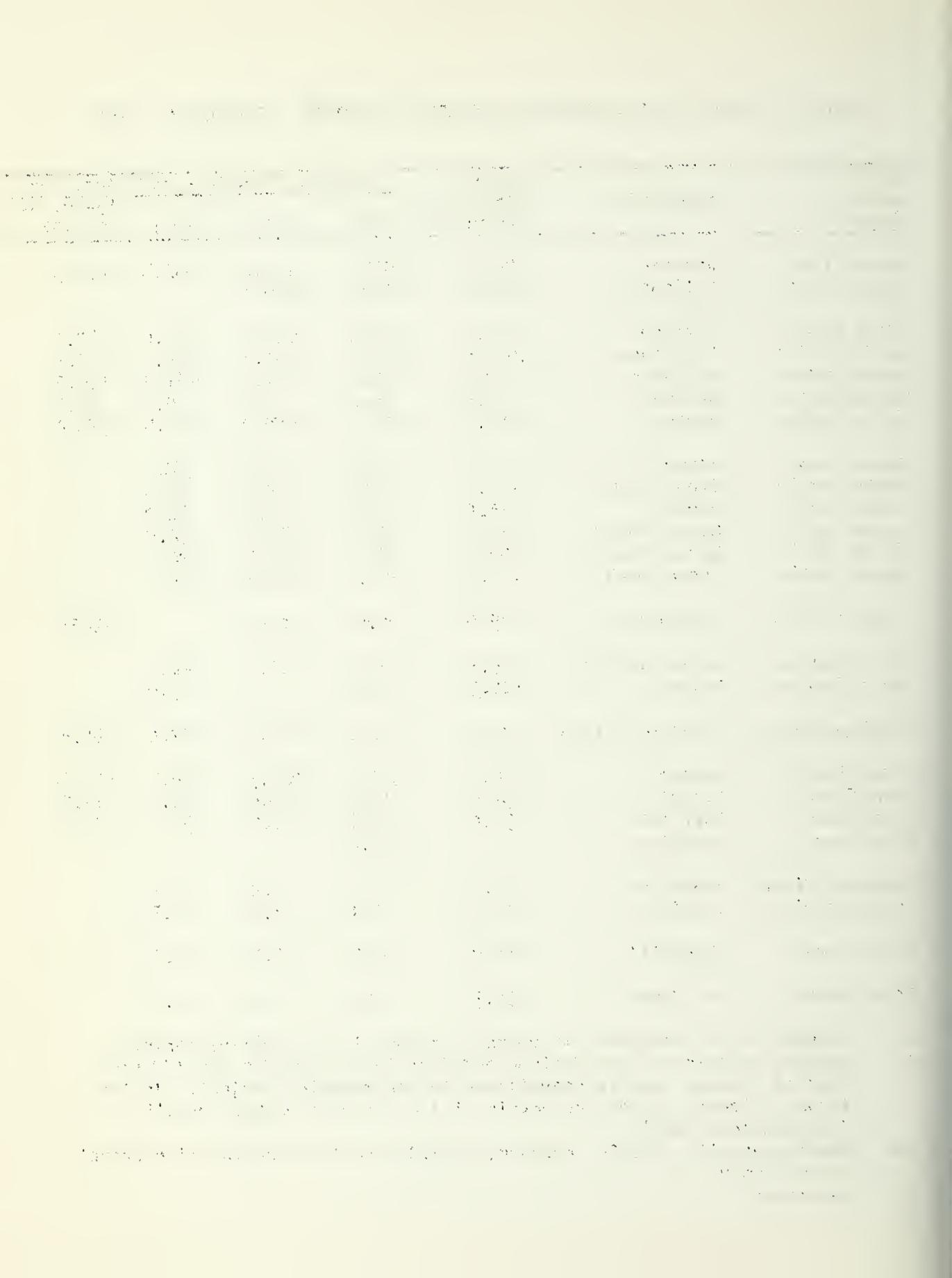
BASIN and/or STREAM	RESERVOIR	USABLE CAPACITY 1000's AF	USABLE STORAGE - 1000 Acre Feet			
			1963	1962	1961	15-Yr. Avg. 1943-57
Snake River	Jackson	847.0	553.7	114.2	342.3	472.9
Snake River	Palisades	1,200.0	909.3	525.1		
North Platte	Seminoe	981.8	310.8	164.9	106.6	143.5
North Platte	Pathfinder	1,011.0	541.1	151.6	235.8	472.5
North Platte	Alcova**	190.5	156.4	159.1	161.5	119.2
North Platte	Guernsey	39.8	12.8	8.0	5.8	35.2
North Platte	Glendo	786.3	325.1	280.9	237.5	329.9
Kansas Basin	Bonny	39.9	38.2	37.6	38.2	
Kansas Basin	Swanson Lake	116.1	112.9	93.5	86.5	
Kansas Basin	Enders	36.0	26.5	28.5	42.0	
Kansas Basin	Harry Strunk	33.9	32.9	29.6	32.0	
Kansas Basin	Harlan County	252.9	355.0	318.7	326.9	
Kansas Basin	Cedar Bluff	176.8	173.1	177.5	185.1	
Laramie River	Wheatland	95.0	N.R.	N.R.		19.3*
Belle Fourche	Belle Fourche	185.2	141.3	21.3	22.5	
Belle Fourche	Keyhole	190.3	59.7		3.0	
Shoshone River	Buffalo Bill***	439.8	174.7	180.3	127.0	244.6
Wind River	Boysen	560.0	340.5	162.3	88.7	474.8*
Wind River	Pilot	31.6	13.5	10.6	10.4	11.2
Wind River	Bull Lake	152.0	95.6	88.7	57.7	70.7
Wind River	Sunshine		47.4			
Cheyenne River	Angostura	92.0	74.3	4.9	2.3	
Cheyenne River	Deerfield	15.1	7.1	3.5	2.3	
Grand River	Shadehill	84.0	42.7	28.2	51.2	
Green River	Big Sandy	38.3	N.R.	6.4	4.0	

* Average is for less than 15 years of record in the 1943-57 period.

** Alcova, downstream from Seminoe and Pathfinder includes 160,170 acre feet of storage that is unavailable to the Kendrick Project. In the future, storage in this reservoir will be held at usable capacity (199,500 acre feet).

*** Usable capacity 439,800, however, 59,500 acre feet are inactive except in emergency

e Estimated



FEDERAL

U. S. Department of Agriculture
Forest Service
Soil Conservation Service

U. S. Department of Commerce
Weather Bureau

U. S. Department of the Interior
Bureau of Reclamation
Geological Survey
National Park Service
Indian Service

STATE

State Engineer of Wyoming

PRIVATE

Wheatland Irrigation District
Greybull Valley Irrigation District
Clouds Peak Soil & Water Conservation District
Cody Soil & Water Conservation District
Dubois-Crowheart Soil & Water Conservation District
Greybull Valley Soil & Water Conservation District
Lake DeSmet Soil & Water Conservation District
Laramie Rivers Soil & Water Conservation District
Little Snake River Soil & Water Conservation District
Medicine Bow Soil & Water Conservation District
Pinedale Soil & Water Conservation District
S & E Soil & Water Conservation District
Shell Valley Soil & Water Conservation District
Shoshone Soil & Water Conservation District
Tongue River Soil & Water Conservation District
Washakie Soil & Water Conservation District
Wheatland Soil & Water Conservation District
Powder River Soil & Water Conservation District
Pavillion & Wind River Soil & Water Conservation District
Powell-Clarks Fork Soil & Water Conservation District
Bridger Valley Soil & Water Conservation District
Big Sandy Soil & Water Conservation District
Lincoln Soil & Water Conservation District

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
P. O. BOX 340
CASPER, WYOMING

POSTAGE & FEES PAID
U. S. DEPARTMENT OF AGRICULTURE

U. S. Department of Agriculture
Library, Current Serial Record
Washington 25, D. C.

2

FIRST CLASS MAIL

FEDERAL - STATE - PRIVATE
COOPERATIVE SNOW SURVEYS

Furnishes the basic data
necessary for forecasting
water supply for irrigation,
domestic and municipal water
supply, hydro-electric power
generation, navigation,
mining and industry

*"The Conservation of Water begins
with the Snow Survey"*